

MONTHLY WEATHER REVIEW,

APRIL, 1880.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to May 13th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 139 Signal Service stations and 14 Canadian stations, as telegraphed to this office; 138 monthly journals and 159 monthly means from the former, and 14 monthly means from the latter; reports from 27 Sunset stations; 225 monthly registers from Voluntary Observers; 39 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Service of, Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

Barometric Pressure.—As compared with the means for the preceding eight years, the pressure for April, 1880, east of the Rocky Mountains, shows a marked deficiency in Iowa, Minnesota and the Upper Lake region, with a corresponding excess over the Middle Atlantic, South Atlantic and East Gulf States, Tennessee and along the coast of New England. The greatest excess is reported from Augusta, Georgia, 0.12 inch above the mean, and the most marked deficiency prevailed at St. Paul, Minn., .08 below the mean. On the Pacific coast region, as compared with the preceding three years, a marked deficiency, ranging from .02 to .09, is reported from Oregon and Washington Territory, while in California an excess prevailed, ranging from .02 at Red Bluff to 0.11 at San Diego.

Local Barometric Ranges.—East of the Rocky Mountains the barometric ranges for April, 1880, increase gradually from the Florida Peninsula northwestward to the States of Nebraska, Iowa, Minnesota. Ranges exceeding one inch occurred in the Upper Lake region, the Upper Mississippi and Lower Missouri valleys, and the eastern Rocky Mountain Slope from central Texas northward to Dakota. The minimum ranges were 0.35 inch at Key West, 0.40 at Punta Rassa, and the maximum ranges 1.54 at North Platte and Marquette, 1.65 at Omaha and 1.89 at Duluth. On the Pacific coast the ranges regularly increased northward; maximum range 1.20 at Umatilla.

Areas of High Pressure.—Eleven areas of high pressure have appeared during April within the limits of the Signal Service maps. Three areas only are of interest:—No. II which, in connection with low area No. II, produced the very heavy rains, from the 2nd to the 4th, on the Pacific coast; No. IV which was marked by the severe frost in the Southern States from the 9th to 12th; No. VIII which, developing on the Pacific coast, passed eastward to the Atlantic coast and was marked by the unusually cold weather from April 29th to May 1st.

No. I.—This area, covering the Ohio valley and the Atlantic States during the 1st, withdrew slowly northeastward and dissipated during the 4th in the Canadian maritime provinces. The highest pressure was reported from Halifax the morning of the 3rd; barometer 30.47, or 0.70 above the normal. During the 2nd, brisk winds being reported, Cautionary Signals were ordered from Fort Macon northward to Sandy Hook.

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